

Claims

1. Longitudinal implant and connecting device wherein said
5 longitudinal implant is fastened to bones on either side of a
damaged area through that connecting device, said implant is
comprised of a filament or fiber composite material and said
connecting device is made of a material harder than said longi-
tudinal implant.
- 10 2. Connecting device according to claim 1, wherein the lon-
gitudinal implant is made of a carbon filament composite mate-
rial.
- 15 3. Connecting device according to claim 1 or 2, wherein the
filaments are encapsulated in a polymer matrix.
4. Connecting device according to claim 3, wherein the fila-
ments are encapsulated in PEEK or PEKEKK.
- 20 5. Connecting device according to any of claims 1 to 4,
wherein the filaments are oriented.
6. Connecting device according to claim 1, wherein the im-
25 plant being an elongated plate having a longitudinal slot ex-
tending along a substantial portion of its length.
7. Connecting device according to claim 6, wherein the con-
necting device comprising a pedicle screw having an upper sec-
30 tion having a width greater than the width of said slot and ex-
teriorly threaded portion extending outwardly from said section
and extending through said slot.

8. Connecting device according to claim 7, wherein an interiorally threaded nut is received by the outer end of said threaded portion whereby said plate can be grasped between said upper section and said nut to tightly secure said plate by threading said upper section.

9. Connecting device according to claim 1, wherein said implant is a rod or a rail.

10. Connecting device according to claim 1, wherein said connecting device comprising a screw and a nut which are made of titanium.

11. Connecting device according to claim 1, wherein said implant is a rail (17) having a rectangular cross section.

12. Connecting device according to any one of claims 1 to 11, wherein the filaments are woven.